

345/87, 94, 98-100, 208
FP = 5/4/2000

IN THE CLAIMS

Claim 1 (Currently Amended): A method of driving an LCD, comprising:

(i) providing an array of pixels;

(ii) providing cholesteric liquid crystals arranged between spaced transparent substrates; and

(iii) providing a reset pulse and a plurality of selection pulses, the reset pulse selected from a group consisting of a pipeline and non-pipeline arrangement ~~whereby to provide resultant driving waveform(s), wherein there is a multiplex addressing driving waveform.~~

(iv) — wherein the selection pulses comprising amplitude modulated selection pulses of variable amplitudes of determined pulse width to provide multiplex addressing resultant driving waveform(s).

Claims 2-4 (Canceled)

Claim 5 (Currently Amended): ~~A~~ The method as defined in Claim 1, wherein partial rows are pipelined.

Claim 6 (Currently Amended): ~~A~~ The method as defined in Claim 1, wherein partial rows are non-pipelined.

Claim 7 (Currently Amended): ~~A~~ The method as defined in Claim 1, wherein voltages of the reset pulses are at least no smaller in value than the reset voltage provided by the reflective property cholesteric liquid crystal.

Claim 8 (Currently Amended): ~~A~~ The method as defined in Claim 7, wherein the reset pulses are greater than the reset voltage.

Claim 9 (Currently Amended): ~~A~~ The method as defined in Claim 1, wherein the selection pulses of the multiplex driving waveform are arranged in groups selected

from clustering together, interleaving with other rows, and a combination of said clustering and said interleaving.

Claim 10 (Currently Amended): ~~A~~The method as defined in Claim 9, wherein the voltages of the selection pulses have absolute values between the threshold voltage and the voltage of the property of minimum reflectivity of the liquid crystal (between one of V1 and V2, V3 and V4, and any combination of V1, V2, V3 and V4).

Claim 11 (Currently Amended): ~~A~~The method as defined in Claim 1, wherein the driving waveform(s) have instantaneous polarity inversion after each pulse in the driving waveform.

Claim 12 (Currently Amended): ~~A~~The method as defined in Claim 11, wherein an opposite polarity of equal magnitude is added to each pulse in the frame period.

Claim 13 (Currently Amended): ~~A~~The method as define in Claim 1, wherein at least some of the pulses of the driving waveform are polarity reversed in the frame period.

Claim 14 (Currently Amended): ~~A~~The method as defined in Claim 1, wherein the polarity of a succeeding pulse of the driving waveform is opposite the polarity of the immediately preceding (instant) pulse.

Claim 15 (Currently Amended): ~~A~~The method as defined in Claim 14, wherein the arrangement of the multiple selection pulses of a succeeding frame period is different from the instant pulse.

Claim 16 (Currently Amended): ~~A~~The method as defined in Claim 13 wherein there is a common driving waveform comprising a combination of said waveforms.

Claim 17 (Currently Amended): ~~A~~The method as defined in Claim 1, wherein there is a gray scale generated by adjusting appropriate voltage levels of the multiple selection pulse of said waveform(s).

Claim 18 (Currently Amended): ~~A~~The method as defined in Claim 17, wherein the gray level is determined by respective voltage levels having absolute values between the threshold voltage and the voltage of minimum reflectivity with respect to the reflectivity property of the cholesteric liquid crystal.

Claim 19 (Currently Amended): ~~A~~The method as defined in Claim 1, wherein the voltage level of all pulses in the driving waveform(s) is determined by the pulse width of reflectivity property of the cholesteric liquid crystal.

Claim 20 (Currently Amended): ~~A~~The method as defined in Claim 14 wherein there is a common driving waveform comprising a combination of said waveforms.

Claim 21 (New): A method of driving an LCD, comprising:
 providing an array of pixels;
 providing cholesteric liquid crystals arranged between spaced transparent substrates, and
 providing a reset pulse and a plurality of selection pulses on a driving line of a driving waveform, the reset pulse selected from a group consisting of a pipeline and non-pipeline arrangement, the selection pulses comprising amplitude modulated selection pulses of variable amplitudes of determined pulse width to provide resultant multiplex addressing driving waveform(s),
wherein the selection pulses of the multiplex addressing driving waveform are arranged in groups selected from clustering together, interleaving with other rows, and a combination of said clustering and said interleaving.